UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,131	10/21/2001	Francisco M. Galanes	M61.12-0393	9228

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EXAMINER
LERNER, MARTIN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/046,131	GALANES ET AL.
	Examiner	Art Unit	
	Martin Lerner	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _26 September 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1 to 56_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 to 56_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _02 June 2006_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 to 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations of independent claims 1, 12, 23, and 52, that attributes are "directly related" to visual rendering and at least one of recognition and audibly prompting, are vague and indefinite. It is appreciated that Applicants are attempting to distinguish by inclusion of the term "directly related" over the modality independent script of *Dantzig et al.* However, Applicants' Specification does not expressly disclose anything about the attributes being "directly related" to the visual rendering and at least one of recognition and audible prompting of the claims, nor would it be immediately clear to one having ordinary skill in the art that the attributes are "directly related" in any sense not necessarily disclosed by *Dantzig et al.* The limitation "directly related" is vague, and may be misdescriptive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 to 2, 4 to 8, 12 to 13, 15 to 19, 23 to 24, 26 to 30, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by *Dantzig et al.*

Regarding independent claims 1, 12, 23, and 52, *Dantzig et al.* discloses:

"a first set of visual controls having attributes directly related to defining desired visual renderings on the client device, the first set of controls being related to client side markup executable by a client browser" – main renderer 14 of a multi-modal presentation manager 11 initiates a first processing thread comprising a GUI presentation manager 15 ("a first set of visual controls having attributes") (column 7, lines 38 to 43: Figure 1); presentation of a graphic user interface (GUI) for an application defines a "desired visual rendering"; multi-modal presentation manager 11 controls an application on a web browser or a desktop (column 8, lines 32 to 35: Figure 1); implicitly, a web browser is executed on a client in a client/server architecture for receiving information from the Internet; in deferred rendering and presentation, a transcoder 30 converts an IML script 12 to a VoiceXML script 32 (column 8, lines 43 to 54: Figure 2); a GUI presentation manager parses IML tags and attributes (column 10, line 60 to column 11, line 2); one thread comprising a GUI presentation manager 15 is "directly related" to defining desired visual renderings on the client device because the

thread immediately initiates a visual modality, even though a preceding IML file is

modality-independent;

"a second set of controls having attributes directly related to defining desired

operation on the client device comprising at least one of recognition and audibly

prompting, the second set of controls using at least one of the first controls, the second

set of controls being related to client side markup executable by a client browser" –

main renderer 14 of a multi-modal presentation manager 11 initiates a second

processing thread comprising a speech renderer 16 ("a second set of controls having

attributes"), wherein the speech renderer 16 utilizes a plurality of speech engines 17 for

speech recognition and text-to-speech synthesis (column 7, lines 38 to 47: Figure 1);

multi-modal presentation manager 11 controls an application on a web browser or a

desktop (column 8, lines 32 to 35: Figure 1); implicitly, a web browser is executed on a

client in a client/server architecture for receiving information from the Internet; in

deferred rendering and presentation, a transcoder 30 converts an IML script 12 to a

VoiceXML script 32 (column 8, lines 43 to 54: Figure 2); a VoiceXML document is

generated from an IML script by parsing IML tags and attributes representing "choice"

selections to build voice prompts (column 10, line 60 to column 11, line 14: Figure 2); a

speech renderer 16 ("a second set of controls") "uses" and "is associated with" GUI

presentation manager 15 ("a first set of controls") because multi-modal presentation

manager 11 automatically integrates and synchronizes voice synthesis and speech

recognition functions with the presentation layer of applications (column 6, line 63 to

column 7, line 8: Figure 1); a second thread comprising a speech renderer 16 is "directly

related" to defining desired operation on the client device because the thread immediately initiates speech recognition or text-to-speech synthesis, even though a preceding IML file is modality-independent;

"a module operable on a computer, the module being configured to receive an authoring page for a website comprising a plurality of the second set of controls, wherein the module is further configured to process the plurality of the second set of controls to generate client side markup executable by the client browser on the client in the server/client system in accordance with the second set of controls and the attributes of the second set of controls for at least one of recognition and audibly prompting, and wherein the module is configured to use at least one of the first set of controls in order to generate markup when processing each of the second set of controls" – a "single-authoring" system and method is an interaction-based programming paradigm for creating content as an intent-based markup script, permitting an application to be written in a manner which is independent of control application logic and presentation (column 5, line 20 to column 6, line 2; column 10, lines 24 to 28); implicitly, authoring for web-based presentation is on "an authoring page" at a client browser; authoring produces content for both GUI presentation manager 15 and speech renderer 16 (column 7, lines 38 to 48); an IML script has attributes, which are parsed to generate a VoiceXML script (column 7, lines 20 to 37).

Regarding claims 2, 4, 13, 15, 24, and 26, *Dantzig et al.* discloses controls relate to grammars for speech recognition (column 9, lines 31 to 39; column 16, lines 6 to 30).

Regarding claims 5, 6, 16, 17, 27, and 28, *Dantzig et al.* discloses controls

relating to XML (column 5, lines 50 to 56), VoiceXML (a form of XML) (Abstract), and

WML (column 6, lines 56 to 62).

Regarding claims 7, 8, 18, 19, 29, and 30, *Dantzig et al.* discloses a speech

renderer 16 generates audible output by text-to-speech synthesis (column 7, lines 42 to

45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 9 to 11, 14, 20 to 22, 25, 31 to 46, and 53 to 56 are rejected under 35

U.S.C. 103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al.* (*'336*).

Dantzig et al. discloses a system and method for generating and presenting

multi-modal applications from markup scripts for synchronizing a GUI presentation layer

with voice synthesis and speech recognition, but omits details relating to "attributes

providing a reference to a location", "a prerecorded audio data file", "an identifier of the

associated control", "a question control", "an answer control", "binding the recognition

value", and "a confirmation control". However, *Ladd et al.* (*'336*) teaches a voice

browser for interactive services. An objective is permit users to access information from

any location in the world via any suitable network access device. (Column 43, Lines 54

to 63) It would have been obvious to one having ordinary skill in the art to include details disclosed by *Ladd et al. ('336)* in a system and method for generating and presenting multi-modal applications from markup scripts of *Dantzig et al.* for a purpose of permitting users to access information from any location in the world via a suitable network access device.

Concerning claims 3, 14, and 25, *Ladd et al. ('336)* discloses attributes for grammars (column 13, lines 6 to 10), and retrieving grammars from database locations (column 12, lines 7 to 14; column 14, lines 18 to 28) for speech recognition.

Concerning claims 9 to 11, 20 to 22, and 31 to 33, *Ladd et al. ('336)* discloses determining an address for playing a prompt to a user (column 13, line 66 to column 14, line 17: Figure 5a: Steps 400, 402, 406); both recorded sound samples (column 15, line 63) and text to speech (TTS) (column 16, lines 11 to 20) are provided.

Concerning claims 34 and 53, *Ladd et al. ('336)* discloses a markup language for text to speech; implicitly, when the text is displayed and the speech is produced for an audible prompt, there is an association of attributes between visual controls and audible controls.

Concerning claims 35 to 37, *Ladd et al. ('336)* discloses an option list in a markup language for controlling which choices are available at a network access apparatus (column 28, lines 9 to 60).

Concerning claim 38, *Ladd et al. ('336)* discloses a FORM input to collect an order in response to a prompt, and post the input to an address (column 20, lines 20 to

46); thus, a markup language controls a prompt, then activates an input, and then performs a post operation.

Concerning claims 39 to 43 and 54, *Ladd et al. ('336)* discloses a markup language for generating an audible prompt of a question and a grammar for an answer; an answer is followed by, and is activated, a question prompt, where an answer is bound for recognition by <INPUT TYPE> (column 18, lines 40 to 55); a post operation is "an event related to operation of binding" (column 20, lines 28 to 46).

Concerning claims 44 to 46 and 55 to 56, *Ladd et al. ('336)* discloses a markup language for re-prompting ("repeating an audible prompt") (column 14, line 57 to column 15, line 16: Figure 5a: Steps 416, 425), and an attribute for confirming a recognition result (column 15, lines 45 to 54: Figure 5a: Step 452).

Claims 47 to 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al. ('336)* as applied to claims 23, 39, 40, 45, and 46 above, and further in view of *WCW Working Draft ("Grammar Representation Requirements for Voice Markup Languages")*.

Ladd et al. ('336) discloses a confirmation control to accept an answer as a recognized result that is correct (column 15, lines 44 to 59: Figure 5b: Step 456). Lack of confirmation implicitly denies a recognized result, whereupon the process continues to replay a prompt for a current step so as to correct a recognition result. (Figures 5a and 5b: Step 446) However, *Ladd et al. ('336)* omits an attribute related to a confidence level for confirming, accepting or denying, and correcting a recognition result. *WCW*

Working Draft teaches grammars for voice markup languages with attributes, where

confidence scoring tightens or relaxes the normal rejection constraints to provide

content based control of performance. (Sections 4.3 and 5.1) It would have been

obvious to one having ordinary skill in the art to provide confidence scoring as taught by

WCW Working Draft in the voice browser for interactive services of *Ladd et al. ('336)* for

a purpose of tightening or relaxing rejection constraints to provide content based control

of performance.

Response to Arguments

Applicants' arguments filed 26 September 2007 have been fully considered but

they are not persuasive.

Applicants argue that independent claims 1, 12, 23, and 52 are allowable

because the limitations of the attributes being "directly related" to defining desired visual

renderings on the client device, and the attributes being "directed related" to defining the

desired operation on the client device comprising at least one of recognition and audibly

prompting, are not disclosed by "processing threads" or modality independent IML files

of *Dantzig et al.* Applicants admit that *Dantzig et al.* will generate modality dependent

markup when the modality neutral IML is processed. Applicants contend that although

VoiceXML may provide programming "exits and constructs", these are simply not

controls used to generate client side markup related to visual renderings. Applicants

state that each of the independent claims recites language similar to that of being

configured to "receive an authoring page for a website comprising a plurality of controls,

wherein the module is further configured to process the controls to generate client side

markup executable by the client browser", and wherein the controls are combined to

form an authoring page. These arguments are not persuasive.

Firstly, it is maintained that the term "directly related", where the attributes are

"directly related" to visual rendering and at least one of recognition and audibly

prompting, is vague and indefinite, and may be misdescriptive. It is appreciated that

Applicants are attempting to distinguish by inclusion of the term "directly related" over

the modality independent script of *Dantzig et al.* However, Applicants' Specification

does not expressly disclose anything about the attributes being "directly related" to the

visual rendering and at least one of recognition and audible prompting. Specifically,

Applicants' Specification, Page 27, Line 31 to Page 38, Line 16: Figures 7 to 10, would

suggest that the controls are not necessarily directly related to attributes. Figure 10

shows that any primary controls 302 are linked to output controls 308 and input controls

310 through QA (Question/Answer) control 320. Generally, moreover, Figures 8 and 9

show that server side visual controls 302 are existing, and controls relating to

recognition and audible prompting 304, 306 are companion controls that somehow use,

or are dependent on, visual controls 302. Thus, visual controls are the main controls,

and the controls relating to recognition and audible prompting are somehow subordinate

to the visual controls, so at least the attributes relating to recognition and audible

prompting are not "directly related" to defining a desired operation of a client device. A

second set of controls is related to an existing first set of controls, so that it may be

misdescriptive to say that they are "directly related" to at least one of recognition and

audibly prompting, too. Because the term "directly related" is vague, not expressly

disclosed by Applicants' Specification, and may be misdescriptive, the term is indefinite.

Applicants are predicating patentability on an indefinite term.

Secondly, *Dantzig et al.* does anticipate the limitation of a first set of controls

having attributes "directly related" to defining desired visual renderings on the client

device, and a second set of controls having attributes "directly related" to defining

desired operation of the client device comprising at least one of recognition and audibly

prompting. Here, it is important to note that the term "directly related" links the attributes

to desired visual or audible renderings -- but not directly to any markup language.

Dantzig et al. does this. That is, the processing threads are "directly related" to what

appears visually and what is produced audibly on a client device of *Dantzig et al.* Even

though there is a modality independent IML file for *Dantzig et al.*, the IML file produces

one thread activating GUI presentation manager 15, and a second thread activating

speech renderer 16. (Column 7, Lines 38 to 46: Figure 1) A GUI presentation manager

15, or its associated thread, and a speech renderer 16, or its associated thread, clearly

produce desired operations of visual and audible renderings "directly" on the client

device. The manner in which the claims are drafted as linking the attributes to

renderings as being "directly related", and the manner in which the GUI presentation

manager 15, or its associated thread, and the speech renderer 16, or its associated

thread, directly produce the visual and audible renderings, does not distinguish the

claims from *Dantzig et al.* Applicants admit that *Dantzig et al.* will generate the modality

dependent markup when the modality neutral IML is processed. However, all that is

needed to anticipate the limitation of the attributes being "directly related" to the desired renderings on the client device is that the modality dependent markup is generated at some point. Any preceding modality neutral IML files do not preclude subsequent modality dependent markup from being "directly related" to desired renderings on a client device because it is the attributes of the modality dependent markup that are "directly related" to what is produced on a client device.

Thirdly, it is agreed that Applicants statement is correct that VoiceXML are not controls used to generate client side markup related to visual renderings. It is now appreciated that VoiceXML produces renderings related to recognition and/or audibly prompting, but not to visual renderings. However, this fact does not in any way materially negate the rejection.

Fourthly, Applicants' statement, by way of clarifying the claims, that the controls relate to how the information is combined to form an authoring page, is traversed. Generally, one skilled in the art would expect the term "authoring page" to describe a means by which a markup language document is created instead of how a markup language page is presented. Nor does Applicants' Specification suggest a contrary interpretation for the term "authoring page." Indeed, the only disclosure of anything akin to an "authoring page" is at Page 29, Lines 23 to 26, Page 33, Lines 27 to 30, and Page 34, Lines 12 to 17. These passages suggest a conventional usage of "authoring page" for developing a website, and not to generating markup at a time of execution. Nor do any of the drawings submitted by Applicants expressly show an element of "an

authoring page". Thus, it is maintained that Applicants' construction of an "authoring

page", as claimed, may be in error.

Therefore, the rejections of claims 1 to 56 are rejected under 35 U.S.C. §112, 2nd

¶, as being indefinite, of claims 1 to 2, 4 to 8, 12 to 13, 15 to 19, 23 to 24, 26 to 30, and

52 under 35 U.S.C. §102(e) as being anticipated by *Dantzig et al.*, of claims 3, 9 to 11,

14, 20 to 22, 25, 31 to 46, and 53 to 56 under 35 U.S.C. §103(a) as being unpatentable

over *Dantzig et al.* in view of *Ladd et al. ('336)*, and of claims 47 to 51 under 35

U.S.C. §103(a) as being unpatentable over *Dantzig et al.* in view of *Ladd et al. ('336)*,

and further in view of *WCW Working Draft*, are proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Martin Lerner whose telephone number is (571) 272-

7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to
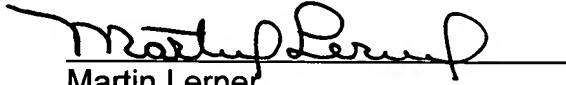
Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML
10/9/07

Martin Lerner
Examiner
Group Art Unit 2626